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# SEQUENCE LISTING

<110> HIATT, ANDREW C.  
HEIN, MICH B.  
FITCHEN, JOHN H.

<120> J CHAIN POLYPEPTIDE TARGETING MOLECULE LINKED TO AN IMAGING AGENT

<130> EPI3003C

<140> 10/062,467

<141> 2002-02-05

<150> 08/782,480

<151> 1997-01-10

<150> 09/005,167

<151> 1998-01-09

<160> 93

<170> PatentIn Ver. 2.1

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35 40 45

Asn Ile Ser Asp Pro Thr Ser Pro Leu Arg Thr Arg Pro Val Tyr His  
50 55 60

Leu Ser Asp Leu Cys Lys Lys Cys Asp Pro Thr Glu Val Glu Leu Asp  
65 70 75 80

Asn Gln Ile Val Thr Ala Thr Gln Ser Asn Ile Cys Asp Glu Asp Ser  
85 90 95

Ala Thr Glu Thr Cys Tyr Thr Tyr Asp Arg Asn Lys Cys Tyr Thr Ala  
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Leu Thr Pro Asp Ala Cys Tyr Pro Asp  
130 135

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 Ile Val Glu Arg Asn Val Arg Ile Ile Val Pro Leu Asn Ser Arg Glu  
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 Leu Ser Asp Leu Cys Lys Lys Cys Asp Thr Thr Glu Val Glu Leu Glu  
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 Asp Gln Val Val Thr Ala Ser Gln Ser Asn Ile Cys Asp Ser Asp Ala  
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 Glu Thr Cys Tyr Thr Tyr Asp Arg Asn Lys Cys Tyr Thr Asn Arg Val  
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 Pro Asp Ser Cys Tyr Pro Asp  
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 Val Glu Arg Asn Ile Arg Ile Val Val Pro Leu Asn Asn Arg Glu Asn  
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                   50                  55                  60  
 Ser Asp Val Cys Lys Lys Cys Asp Pro Val Glu Val Glu Leu Glu Asp  
   65                  70                  75                  80  
 Gln Val Val Thr Ala Thr Gln Ser Asn Ile Cys Asn Glu Asp Asp Gly  
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Val Pro Glu Thr Cys Tyr Met Tyr Asp Arg Asn Lys Cys Tyr Thr Thr  
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Gln Val Phe Thr Ala Ser Gln Ser Asn Ile Cys Pro Asp Asp Asp Tyr  
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 Glu Arg Asn Ile Gln Ile Thr Ile Pro Thr Ser Ser Arg Met Xaa Ile  
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 Ser Asp Pro Tyr Ser Pro Leu Arg Thr Gln Pro Val Tyr Asn Leu Trp  
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 Asp Ile Cys Gln Lys Cys Asp Pro Val Gln Leu Glu Ile Gly Gly Ile  
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 Pro Val Leu Ala Ser Gln Pro Xaa Xaa Ser Xaa Pro Asp Asp Glu Cys  
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           85                  90                  95  
 Arg Asn Lys Cys Tyr Thr Val Leu Val Pro Pro Gly Tyr Thr Gly Glu  
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 gct cgt att act tct aga atc atc cgt agc tca gag gac cca aat gaa 96  
 Ala Arg Ile Thr Ser Arg Ile Ile Arg Ser Ser Glu Asp Pro Asn Glu  
 15 20 25 30  
 gat ata gtc gaa cgt aac atc cgt atc atc gtc cca ctg aat aac cgg 144  
 Asp Ile Val Glu Arg Asn Ile Arg Ile Ile Val Pro Leu Asn Asn Arg  
 35 40 45  
 gag aat atc tca gat cct aca agt ccg ttg cgc aca cgc ttc gta tac 192  
 Glu Asn Ile Ser Asp Pro Thr Ser Pro Leu Arg Thr Arg Phe Val Tyr  
 50 55 60  
 cac ctg tca gat ctg tgt aag aag tgt gat cca aca gag gta gag ctg 240  
 His Leu Ser Asp Leu Cys Lys Lys Cys Asp Pro Thr Glu Val Glu Leu  
 65 70 75  
 gac aat cag ata gtc act gcg act caa agc aac att tgc gat gag gac 288  
 Asp Asn Gln Ile Val Thr Ala Thr Gln Ser Asn Ile Cys Asp Glu Asp  
 80 85 90  
 agc gct aca gaa acc tgc agc acc tac gat agg aac aaa tgc tac acg 336  
 Ser Ala Thr Glu Thr Cys Ser Thr Tyr Asp Arg Asn Lys Cys Tyr Thr  
 95 100 105 110  
 gcc gtg gtt ccg ctc gtg tat ggt gga gag aca aaa atg gtg gaa act 384  
 Ala Val Val Pro Leu Val Tyr Gly Gly Glu Thr Lys Met Val Glu Thr  
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 gcc ctt acg ccc gat gca tgc tat ccg gac tgaattc 421  
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 tca gag gac cca aat gaa gat ata gtc gaa cgt aac atc cgt atc atc 96  
 Ser Glu Asp Pro Asn Glu Asp Ile Val Glu Arg Asn Ile Arg Ile Ile  
 20 25 30  
 gtc cca ctg aat aac cgg gag aat atc tca gat cct aca agt ccg ttg 144  
 Val Pro Leu Asn Asn Arg Glu Asn Ile Ser Asp Pro Thr Ser Pro Leu  
 35 40 45  
 cgc aca cgc ttc gta tac cac ctg tca gat ctg tgt aag aag gat gag 192  
 Arg Thr Arg Phe Val Tyr His Leu Ser Asp Leu Cys Lys Lys Asp Glu  
 50 55 60  
 gac agc gct aca gaa acc tgc tg 215  
 Asp Ser Ala Thr Glu Thr Cys  
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 gcttcgtata ccacctgtca 140

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<212> DNA

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1				5				10						15		
tca	gag	gac	cca	aat	gaa	gat	ata	gtc	gaa	cgt	aac	atc	cgt	atc	atc	96
Ser	Glu	Asp	Pro	Asn	Glu	Asp	Ile	Val	Glu	Arg	Asn	Ile	Arg	Ile	Ile	
			20					25					30			
gtc	cca	ctg	aat	aac	cgg	gag	aat	atc	tca	gat	cct	aca	agt	ccg	ttg	144
Val	Pro	Leu	Asn	Asn	Arg	Glu	Asn	Ile	Ser	Asp	Pro	Thr	Ser	Pro	Leu	
			35				40					45				
cgc	aca	cgc	ttc	gta	tac	cac	ctg	tca	gat	ctg	tgt	aag	aag	tgt	gat	192
Arg	Thr	Arg	Phe	Val	Tyr	His	Leu	Ser	Asp	Leu	Cys	Lys	Lys	Cys	Asp	
	50					55					60					
cca	aca	gag	gta	gag	ctg	gac	aat	cag	ata	gtc	act	gcg	act	caa	agc	240
Pro	Thr	Glu	Val	Glu	Leu	Asp	Asn	Gln	Ile	Val	Thr	Ala	Thr	Gln	Ser	
	65				70				75					80		
aac	att	tgc	gat	gag	gac	agc	gct	aca	gaa	acc	tgc	tac	tgaattc			286
Asn	Ile	Cys	Asp	Glu	Asp	Ser	Ala	Thr	Glu	Thr	Cys	Tyr				
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 ata gtc act gcg act caa agc aac att tgc gat gag gac agc gct aca 96  
 Ile Val Thr Ala Thr Gln Ser Asn Ile Cys Asp Glu Asp Ser Ala Thr  
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 gaa acc tgc 105  
 Glu Thr Cys  
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<210> 15  
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 t 61

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 <211> 198  
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 aagagtgcga gttttaag 198

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 Ala Arg Ile Thr Ser Arg Ile Ile Arg Ser Ser Glu Asp Pro Asn Glu  
 15 20 25 30



Asp	Ile	Val	Glu	Arg	Asn	Ile	Arg	Ile	Ile	Val	Pro	Leu	Asn	Asn	Arg	
				35							40			45		
Glu	Asn	Ile	Ser	Asp	Pro	Thr	Ser	Pro	Leu	Arg	Thr	Arg	Phe	Val	Tyr	
				50							55			60		
His	Leu	Ser	Asp	Leu	Cys	Lys	Lys	Cys	Asp	Pro	Thr	Glu	Val	Glu	Leu	
				65							70			75		
Asp	Asn	Gln	Ile	Val	Thr	Ala	Thr	Gln	Ser	Asn	Ile	Cys	Asp	Glu	Asp	
				80							85			90		
Ser	Ala	Thr	Glu	Thr	Cys	Ser	Thr	Tyr	Asp	Arg	Asn	Lys	Cys	Tyr	Thr	
				95							100			105		
Ala	Val	Val	Pro	Leu	Val	Tyr	Gly	Gly	Glu	Thr	Lys	Met	Val	Glu	Thr	
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Ala	Leu	Thr	Pro	Asp	Ala	Cys	Tyr	Pro	Asp							
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Val Pro Leu Asn Asn Arg Glu Asn Ile Ser Asp Pro Thr Ser Pro Leu
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35 40 45

Leu

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Cys Tyr Pro Asp  
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20 25 30

Val Pro Leu Asn Asn Arg Glu Asn Ile Ser Asp Pro Thr Ser Pro Leu  
35 40 45

Arg Thr Arg Phe Val Tyr His Leu Ser Asp Leu Cys Lys Lys Cys Asp  
 50 55 60

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 65 70 75 80

Asn Ile Cys Asp Glu Asp Ser Ala Thr Glu Thr Cys Tyr  
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 20 25 30

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Trp Cys Phe Tyr Pro Asn Thr Ile Asp Val Pro Pro Glu Glu Glu Cys  
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Glu Phe  
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tttctgtagc gctgtcctca tcgcaaagt tgctttgagt cgcagtgact atctgattgt 180  
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<213> Homo sapiens

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cctctgagct acggatgatt 140

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ctagaagtaa tacgagcaca cttgcacttc t 31

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 gtatacgaag cgtgtgcgca acggacttgt aggatctgag atattctccc ggttattcag 180  
 tgggacgatg atacggatgt tacgttcgac tatactctca tttgggtcct ctgagctacg 240  
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<210> 37  
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<400> 37  
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<220>  
 <223> Description of Artificial Sequence: Illustrative  
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<220>  
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<220>  
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       1

<210> 41  
 <211> 6  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Linker peptide

<400> 41  
 Glu Lys Ala Val Ala Asp  
     1                    5

<210> 42  
 <211> 131  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)..(78)

<400> 42  
 atg aaa ttc tta gtc aac gtt gcc ctt ttt atg gtc gta tac att tct   48  
 Met Lys Phe Leu Val Asn Val Ala Leu Phe Met Val Val Tyr Ile Ser  
     1                    5                    10                    15  
  
 tac atc tat gcg gat ccg agc tcg agt gct ctagatctgc agctggtacc   98  
 Tyr Ile Tyr Ala Asp Pro Ser Ser Ser Ala  
             20                    25  
  
 atggaattcg aagcttggag tcgactctgc tga                           131

<210> 43  
 <211> 26  
 <212> PRT  
 <213> Homo sapiens

<400> 43  
 Met Lys Phe Leu Val Asn Val Ala Leu Phe Met Val Val Tyr Ile Ser  
     1                    5                    10                    15  
  
 Tyr Ile Tyr Ala Asp Pro Ser Ser Ser Ala  
             20                    25

<210> 44  
 <211> 4  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Intracellular  
           targeting signal

<400> 44  
 Lys Asp Glu Leu  
     1

<210> 45  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 45

Ala Ile Gln Asp Pro Arg Leu Phe Ala Glu Glu Lys Ala Val Ala Asp  
 1 5 10 15

&lt;210&gt; 46

&lt;211&gt; 61

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

&lt;400&gt; 46

gatcaggaag atgaacgtat tggtctgggt gacaacaagt gcaagtgtgc tcgtattact 60  
 t 61

&lt;210&gt; 47

&lt;211&gt; 61

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

&lt;400&gt; 47

ctagaagtaa tacgagcaca cttgcacttg ttgtcaacca gaacaatacg ttcattcttc 60  
 t 61

&lt;210&gt; 48

&lt;211&gt; 31

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

&lt;400&gt; 48

gatcagaagt gcaagtgtgc tcgtattact t 31

&lt;210&gt; 49

&lt;211&gt; 31

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

&lt;400&gt; 49

ctagaagtaa tacgagcaca cttgcacttc t 31



<210> 50  
<211> 61  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 50  
gatcaggaag atgaacgtat tggtctgggt gacaacaagt gcaagtcgc tcgtattact 60  
t 61

<210> 51  
<211> 61  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 51  
ctagaagtaa tacgagcgga cttgcacttg ttgtcaacca gaacaatacg ttcattctcc 60  
t 61

<210> 52  
<211> 61  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 52  
gatcaggaag atgaacgtat tggtctgggt gacaacaagt gcaaggttc tcgtattact 60  
t 61

<210> 53  
<211> 61  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 53  
ctagaagtaa tacgagcaac cttgcacttg ttgtcaacca gaacaatacg ttcattctcc 60  
t 61

<210> 54  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 54  
 ctagaatcat ccgtagctca gaggacccaa atgaagatat agtcgaa 47

<210> 55  
 <211> 58  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 55  
 gatacggatg ttacgttcga ctatatcttc atttgggtcc tctgagctac ggatgatt 58

<210> 56  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 56  
 cgtaacatcc gtatcatcgt ccactgaat aaccgggaga atatctcag 49

<210> 57  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 57  
 cgtaacatcc gtatcatcgt ccactgaat aaccgggagc acatctcag 49

<210> 58  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 58

acggacttgt aggatctgag atattctccc ggttattcag tgggacgat

49

<210> 59

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 59

acggacttgt aggatctgag atgtgctccc ggttattcag tgggacgat

49

<210> 60

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 60

atcctacaag tccgttgccg acacgcttcg tataccacct gtca

44

<210> 61

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 61

gatctgacag gtggtatacg aagcgtgtgc gca

33

<210> 62

<211> 60

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 62

gatctgtgta agaagtgtga tccaacagag gtagagctgg acaatcagat agtcactgca 60

<210> 63  
 <211> 44  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 63  
 gatctgtgta agaaggatga ggacagcgct acagaaacct gctg 44

<210> 64  
 <211> 44  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 64  
 aattcagcag gtttctgtag cgctgtcctc atccttctta caca 44

<210> 65  
 <211> 62  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 65  
 gatctgtgta agaaggatga ggacagcgct acagaaacct gctacgagaa ggatgagctg 60  
 tg 62

<210> 66  
 <211> 62  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 66  
 aattcacagc tcatccttcg cgtcgcaggt ttctgtagcg ctgtcctcat ccttcttaca 60  
 ca 62

<210> 67  
 <211> 59

<212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 67  
 gatctgtgta agaagtctga tatcgatgaa gattccgcta cagaaacctg cagcacatg 59

<210> 68  
 <211> 59  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 68  
 aattcatgtg ctgcagggtt ctgtagcgga atcttcatcg atatcagact tcttacaca 59

<210> 69  
 <211> 64  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 69  
 gatctgtcta agaagtctga tatcgatgaa gattacagat tcttcagact atagctactt 60  
 ctaa 64

<210> 70  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence

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 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 70  
 aatcttcacg gatatcagac ttcttagaca 30

<210> 71  
 <211> 64  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic

## oligonucleotide

<400> 71  
 gatctgggta agaagtctga tatcgatgaa gattaccaat tcttcagact atagctactt 60  
 ctaa 64

<210> 72  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 72  
 aatcttcacg gatatcagac ttcttaacca 30

<210> 73  
 <211> 41  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 73  
 attgtccagc tctacctctg ttggatcaca cttcttacac a 41

<210> 74  
 <211> 46  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 74  
 actcaaagca acatttgcca tgaggacagc gctacagaaa cctgca 46

<210> 75  
 <211> 57  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 75  
 gggtttctgta gcgctctgct catcgcaaat gttgctttga gtcgcagtga ctatctg 57

<210> 76  
 <211> 59  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 76  
 gcacctacga taggaacaaa tgctacacgg ccgtgggtcc gctcgtgtat ggtggagag 59

<210> 77  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 77  
 gagcggaacc acggccgtgt agcatttggt cctatcgtag gtgctgca 48

<210> 78  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 78  
 acaaaaatgg tggaaactgc ccttacgccc gatgcatgct atccggactg 50

<210> 79  
 <211> 69  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 79  
 aattcagtcc ggatagcatg catcgggcgt aagggcagtt tccaccattt ttgtctctcc 60  
 accatacac 69

<210> 80  
 <211> 62  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 80

acaaaaatgg tggaaactgc ccttacgccc gatgcatgct atccggacaa ggatgaattg 60  
tg 62

<210> 81

<211> 81

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 81

aattcacaat tcataccttgc ccggatagca tgcatacgggc gtaagggcag tttccaccat 60  
ttttgtctct ccaccataca c 81

<210> 82

<211> 88

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 82

gatcaggctcg ctgccatcca agacccgagg ctgttcgccg aagagaaggc cgtcgctgac 60  
tccaagtgc agtgtgctcg tattactt 88

<210> 83

<211> 88

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 83

ctagaagtaa tacgagcaca cttgcacttg gagtcagcga cggccttctc ttcggcgaac 60  
agcctcgggt cttggatggc agcgacct 88

<210> 84

<211> 10

<212> PRT

<213> Artificial Sequence



&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
targeting peptide

&lt;400&gt; 84

Cys Ala Ala Pro Lys Lys Lys Arg Lys Val  
1 5 10

&lt;210&gt; 85

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
targeting peptide

&lt;400&gt; 85

Cys Ala Ala Lys Arg Pro Ala Ala Ile Lys Lys Ala Gly Gln Ala Lys  
1 5 10 15

Lys Lys Lys

&lt;210&gt; 86

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Intracellular  
targeting signal

&lt;400&gt; 86

His Asp Glu Leu  
1

&lt;210&gt; 87

&lt;211&gt; 77

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

&lt;400&gt; 87

gcgatgacga cgataaggcc caaacggaga cctgtactgt tgcgcctcgt gaacggcaaa 60  
actgcggatt cccggga 77

&lt;210&gt; 88

&lt;211&gt; 66

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 88

gttttgccgt tcacgaggcg caacagtaca ggtctccgtt tgggccttat cgtcgtcatc 60  
gctgca 66

<210> 89

<211> 72

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 89

gtaacaccct ctcagtgcgc taataaaggc tgctgttttg atgacacggc acggggcggt 60  
ccgtggtgct tc 72

<210> 90

<211> 72

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 90

gccccgtacc gtgtcatcaa aacagcagcc tttattagcg cactgagagg gtgttacttc 60  
cggaatccg ca 72

<210> 91

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 91

tacccaata caattgacgt tccgcctgaa gaagagtgcg agttttaag 49

<210> 92

<211> 68

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic



Creation date: 09-03-2003  
Indexing Officer: ARAHMANYAR - ABDUL RAHMANYAR  
Team: OIPEScanning  
Dossier: 10062467

Legal Date: 01-29-2003

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